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ABSTRACT

The articles in this bibliography represent holdings of the Test Center of the Northwest Regional Educational Laboratory in the area of assessment in school and classroom climate, student self-concept, student motivation to learn, and student attitude toward school. The annotation for each source includes title and author information and information on availability, as well as a brief description of the article, instrument, paper, or volume. There are 73 resources listed alphabetically by author or institution. (SLD)

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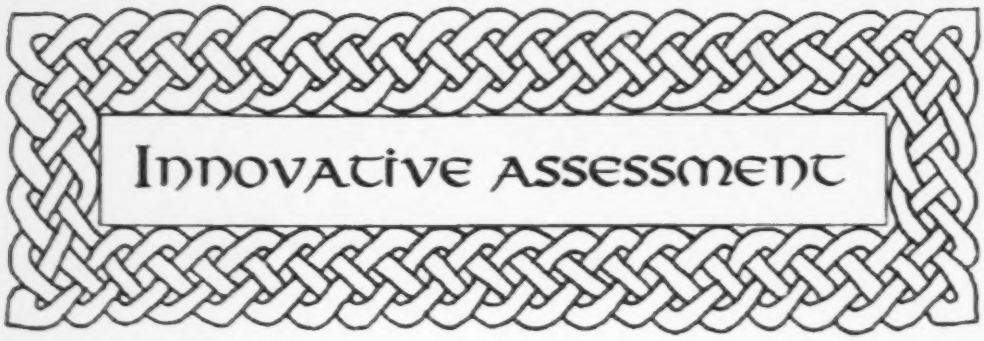

BIBLIOGRAPHY ON ASSESSMENT:

FACTORS THAT INFLUENCE ACHIEVEMENT

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Innovative Assessment

Bibliography on Assessment:
FACTORS THAT INFLUENCE ACHIEVEMENT

August 1996 Edition

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BIBLIOGRAPHY ON ASSESSMENT: Factors That Influence Achievement

August 1996

The following articles represent Test Center holdings to date in the area of assessment in school and classroom climate, student self-concept, student motivation to learn, and student attitude toward school. Presence on the list does not necessarily imply endorsement; articles are included to stimulate thinking and provide ideas. Users should carefully review the content and technical characteristics of any instrument they are considering for use. For more information, contact Matthew Whitaker, Test Center Clerk, at (503) 275-9582, Northwest Regional Educational Laboratory, 101 SW Main, Suite 500, Portland, Oregon 97204, e-mail: testcenter@nwrel.org. To purchase a copy of this bibliography, please call NWREL's Document Reproduction Service at (503) 275-9519.

Annenberg/CPB Math and Science Project. ***What Should I Look for in a Math Classroom?*** **Available from: Annenberg/CPB Math and Science Project, (800) 965-7373.**

This brochure for parents contains a checklist of what to look for in a math classroom—what students and teachers should be doing. It is based on current models of sound math instruction. No technical information is included.

(TC# 100.4WHASHL)

Bagley, Theresa, and Catarina Gallenberger. ***Assessing Students' Dispositions: Using Journals to Improve Students' Performance.*** **Located in: The Mathematics Teacher 85, November 1992, pp. 660-663.**

The authors discuss the use of journals to elicit student comments that can be examined for high school student attitude toward math, ability to make mathematical connections, and understanding. They present many questions, tasks, and instructions for getting students to self-reflect, and provide good, practical suggestions for managing the process. However, the authors do not provide criteria for examining student responses—what to look for in responses that are indicators of attitude, connections, or understanding. Therefore, the paper

will be useful only to the extent that users have the expertise to know what to look for in responses.

(TC# 500.6ASSSTD)

Baldwin, Beatrice, and Nancy K. Martin. *Using Factor Analysis to Establish the Construct Validity of an Inventory of Classroom Management Style*, 1994. Available from: Beatrice Baldwin, Southeastern Louisiana University, Center for Educational Services & Research, SLU Box 782, Hammond, LA 70402, (504) 549-5019, e-mail: scer1027@selu.edu

This article describes a study that examined the validity of *Inventory of Classroom Management Style (ICMS)*, an update of the older *Beliefs on Discipline Inventory*. The *ICMS* consists of 48 questions covering four dimensions of teacher classroom management behavior:

- Teacher beliefs about students
- Communication
- Teacher beliefs about classroom management during instruction—physical layout of the room, time, classroom routines
- Teacher beliefs about discipline—rule setting and handling appropriate and inappropriate behavior

Results classify teachers as either "typically controlling," (the outside world controls behavior); "typically noncontrolling," (students have inner drives and are self-motivating); or interactionalist" (in the middle). Only a few of the questions on the survey are included in the article. Some technical information is included.

(TC# 130.4USIFAA)

Baldwin, Lee, Freeman Coney III, and Roberta Thomas. *School Effectiveness Questionnaire (SEQ)*, 1993. Available from: Harcourt Brace Educational Measurement, Order Service Center, PO Box 839954, San Antonio, TX 78283, (800) 228-0752, fax: (800) 232-1223.

The *SEQ* includes surveys for teachers, parents, and students that ask about 11 areas of school effectiveness: effective instructional leadership, clear and focused mission, safe and orderly environment, positive school climte, high expectations, frequent assessment/monitoring of student achievement, emphasis on basic skills, maximum opportunities for learning, parent community involvement, strong professional development, and teacher involvement in decisionmaking.

Each survey includes 36-70 questions and takes about 20 minutes to complete. Some technical information is available.

(TC# 100.4SCHEFQ)

Battle, James. *Culture-Free Self-Esteem Inventories (CFSEI-2), Second Edition*, 1992. Available from: Pro-Ed, 8700 Shoal Creek Blvd., Austin, TX 78757, (512) 451-3246.

The CFSEI-2 has two levels (one for students in grades 2-9 and the other for adults aged 16-65) designed to assess general, social, academic, and parent-related self-esteem. It was designed to screen individuals who may need assistance. There are various forms of the tests comprising 30 to 60 questions such as, "I like to spend most of my time alone," and "I worry a lot." There is help with administration and scoring, case studies, information on programs to enhance self-esteem, a fair amount of technical information, and norms.

(TC# 223.3CULFRS2)

Bolte, Claus. *Conception and Application of a Learning Climate Questionnaire Based on Motivational Interest Concepts for Chemistry Instruction at German Schools.* Located in: Darrell L. Fisher (Ed.), The Study of Learning Environments, Volume 8, 1994, pp. 182-192. Available from: Darrell L. Fisher, Science and Mathematics Education Centre, Curtin University of Technology, GPO Box U1987, Perth, Western Australia 6001.

This short paper describes a 21-question instrument, translated from German, designed to assess high school student attitude toward chemistry. Questions cover overall satisfaction, comprehensibility of requirements, subject relevance, students' opportunity to participate, and class cooperation. Although the actual instrument is not included in the paper, enough is presented that the survey can be reconstructed. Some technical information is included.

(TC# 650.4CONAPL)

Bonk, Curtis Jay, Elizabeth J. Oyer, and Padma V. Medury, 1995. *Social Constructivism and Active Learning Environments (SCALE).* Available from: Curtis Jay Bonk, Indiana University, Department of Educational Psychology, School of Education, Room 4022, Bloomington, IN 47405-1006.

This article discusses the ongoing development and testing of the *SCALE*, an attempt to define and measure constructivist learning environments. Students in grades 6-12 respond to 40 questions that ask about their preferred and actural learning environments. Questions relate to eight proposed dimensions of a "constructivist" environment:

- *Teacher Clarification*: extent to which students are provided with explanations, examples and multiple ways of understanding

- *Student Centeredness*: extent to which learning and thinking decisions are placed in student hands
- *Teacher Guidance*: extent to which teacher demonstrates problem steps and provides scaffolding
- *Student Prior Knowledge*: extent to which learning activities are personally relevant and related to prior learning
- *Generation of Connections*: extent to which students build their own knowledge connections
- *Questioning Discussing*: extent to which classroom conjecture, discussion, and questioning - asking behavior is encouraged
- *Media and Resource-Based Exploration*: extent to which technical tools and other resources are used
- *Collaboration and Negotiation*: extent to which students socially interact to derive meaning and reach consensus

This paper provides considerable technical information on reliability and validity.

(TC# 100.4SCALES)

Bracken, Bruce A. *Multidimensional Self Concept Scale*, 1992. Available from: Pro-Ed, 8700 Shoal Creek Blvd., Austin, TX 78757, (512) 451-3246.

The Multidimensional Self Concept Scale is designed to determine various aspects of self-concept in students aged 9 to 19: social, academic, general competence, and physical self-concept. It was designed more as a clinical tool than as a classroom tool—to explore the possible reasons for poor academic performance or behavior problems. There is assistance with scoring and interpretation, as well as help with self-concept improvement. There are norms and technical information.

(TC# 223.3MULSEC)

Brown, Linda, and Donald D. Hammill. *Behavior Rating Profile, Second Edition—A Comprehensive Approach to Measuring the Behavior of School-Aged Children at Home, at School, and with Peers (BRP-2)*, 1990. Available from: Pro-Ed, 8700 Shoal Creek Blvd., Austin, TX 78757, (512) 451-3246.

The BRP-2 is a battery of six instruments designed to evaluate grade 1-12 students' behaviors at home, in school, and in interpersonal relationships. Five instruments are rating forms (various student, teacher, and parent forms), the sixth instrument is a sociogram. Surveys

contain between 20 and 30 questions. Questions include such things as the frequency with which the student tattles, bullies other children, cheats, and disrupts the classroom. There is assistance with scoring and using results. There is a fair amount of technical information and norms.

(TC# 200.3BEHRAP2)

California Department of Education, School Improvement Office. *Guide and Criteria for Program Quality Review—Middle Level*, 1994. Available from: Bureau of Publications, Sales Unit, California Department of Education, PO Box 271, Sacramento, CA 95812, (916) 445-1260, fax (916) 323-0823.

This guide is intended for self-study by middle schools. "The goal of the self-review is to enable the entire school community to focus, through extensive discussion, on how the curriculum and instruction in your school can be improved so that *all* students can be fully engaged in a high-quality thinking, meaning-centered curriculum. As part of the self-review process, the teaching staff talk indepth about the instructional program and what the nature and quality of their students' work indicates to them about the instructional program. Staff discussion of student work, student performance, student outcomes, and teaching practices, and comparisons of all these to the vision for student learning set forth in the frameworks and in the curricular criteria, lead to a successful self-review."

The self-review guide covers criteria for assessing curriculum and instruction in health, history, social science, language arts, math, physical education, science, and visual/performing arts. It also includes criteria for an overall learning environment. All these are based on current cognitive theory on how students learn and current content standards in the various disciplines. No technical information is included.

(TC# 100.4GUICRP)

Candoli, Carl, Karen Cullen, and Daniel Stufflebeam. *Superintendent Performance Evaluation-Current Practice and Directions for Improvement—Executive Summary—DRAFT*, 1994. Available from: The Evaluation Center, Western Michigan University, Kalamazoo, MI 49008, (616) 383-8166.

After providing a general overview of the current state of superintendency evaluation, the authors:

1. Delineate the specific duties of superintendents

2. Suggest pertinent information to collect

3. Provide timelines

This is good as far as it goes. The missing part relates to how to judge the quality of the information collected.

(TC# 110.4SUPPEE)

Center for Talent Development. *Elementary School Pre-Post Survey* and *Middle/High School Pre-Post Survey*, 1992. Available from: Evaluation Coordinator, Center for Talent Development, Northwestern University, Andersen Hall, 2003 Sheridan Rd., Evanston, IL 60208, (708) 491-4979.

This document contains surveys of student attitudes toward mathematics and science. There are two levels—elementary and middle/high school. It was designed for use with Access 2000 participants who are primarily African-American and Hispanic students in an inner-city public school system and enrolled in a math/science/engineering enrichment program. No technical information is included.

(TC# 220.3QUEELM)

Conrath, John M. *CAPSOL Style of Learning Assessment*, 1991. Available from: Process Associates, 3360 Olivesburg Rd., Mansfield, OH 44903, (800) 772-7809 or (419) 522-4644.

The *CAPSOL* is a 45-question survey designed to measure nine aspects of grade 4-12 students' learning style: preference for receiving information (visual, auditory, or kinesthetic), preference for working alone or in a group, preference for oral or written expression, and linear or intuitive thinking. The information is used to plan instruction in the classroom. There is some assistance with interpretation and use. Only a little technical information is included.

(TC# 223.3CAPSOL)

Coopersmith, Stanley. *Self-Esteem Inventories (SEI)*, 1981. Available from: Consulting Psychologists Press, Inc., 577 College Ave., PO Box 60070, Palo Alto, CA 94306, (415) 857-1444.

The *SEI* is designed to measure "evaluative attitudes toward the self in social, academic, family, and personal areas of experience." There are three forms, ranging from 25 to 58 questions, for use with students of different ages (in grades 1-12). The author recommends that a "behavioral observational rating be administered along with *SEI*. A brief narrative of teacher comments is also helpful." The author is in favor of multiple measures of self-esteem. The technical information on the School Form is extensive but old.

(TC# 223.3SELESI)

Coopersmith, Stanley, and Ragnar Gilberts. *Behavioral Academic Self-Esteem (BASE)—Experimental Edition*, 1982. Available from: Consulting Psychologists Press, Inc., 577 College Ave., PO Box 60070, Palo Alto, CA 94306, (415) 857-1444.

The *BASE* measures "children's academic self-esteem by using direct observations of their classroom behaviors." The *BASE* has 16 questions, takes one hour to complete, and has been used in grades pre-K through 8. The authors make a good point that this observer-rated measure may help to control for social desirability responses when people self-report. Scores are reported in the areas of student initiative, social attention, success/failure, social attraction, and self-confidence. Technical information is extensive but old. (A telephone call to the publisher established that no updates are planned, and the research on the test seems to have declinced since the death of Dr. Coopersmith.)

(TC# 223.3BEHACS)

Dusewicz, Russell A., and Francine S. Beyer. *Dimensions of Excellence Scales: Survey Instruments for School Improvement Manual*, 1990. Available from: RBS Publications, Research for Better Schools, 444 N. Third St., Philadelphia, PA, 19123, (215) 574-9123.

This Dimensions of Excellent Scales (*DOES*) package is a set of three survey instruments designed for school staff (teachers, administrators, non-instructional staff, and school board members), parents, and students (grades 4 and above), to assess the quality and effectiveness of a local school or district. The authors claim that each survey addresses dimensions found to be related to school effectiveness in a wide variety of educational research studies. The dimensions covered are:

- *School Climate*: the level of shared decisionmaking, academic commitment, high expectations, morale, high attendance, attractive facilities, and interrelations.
- *Leadership*: the role of the leadership in setting goals, encouraging improvement, involving staff, decisionmaking, providing instructional support, ensuring a safe environment, supporting staff development, and seeking community and parental support.
- *Teacher Behavior*: the level of teacher involvement in school activities, planning, instructional design, assessment, classroom management, establishing student expectations, and knowledge about their curricular areas.
- *Curriculum*: the scope and articulation of students throughout the curriculum, the content of the core curriculum, and the development and implementation of the curriculum.
- *Monitoring and Assessment*: the communication of assessment information, appropriateness of tests, grading policy and standards, variety of assessment methods, use of test results, and accuracy of assessment records.

- *Student Discipline and Behavior*: the clarity of disciplinary policies, existence of school-parent partnerships, utilization of disciplinary prevention rather than punishment, leadership and teacher role models, and existence of an environment that enhances discipline.

- *Staff Development*: the philosophy of purpose, organizational goals, level of dedicated resources, content, and evaluation of programs.

- *Parent Involvement*: the level of staff communication to parents, congruence of activities to parental and student needs, opportunities for parental involvement, and the level of parental commitment to school goals.

Surveys include 44 to 200 questions answered on a five-point scale from "almost always" to "almost never." Each survey requires less than one hour to administer. Some technical information is reported.

(TC# 100.4DIMOFE2)

EdITS. *Dimensions of Self-Concept (DOSC)*, 1984/1989. Available from: EdITS/Educational & Industrial Testing Service, PO Box 7234, San Diego, CA 92167, (619) 222-1666.

The purpose of the *DOSC* is "to identify students who might experience difficulty in their schoolwork because of ... low self-esteem," and to provide help with counseling and guidance. Five dimensions are used to describe self-concept: (1) level of aspiration, (2) anxiety, (3) academic interest and satisfaction, (4) leadership and initiative, and (5) identification vs. alienation. There are three levels: (a) grades 4, 5, and 6, (b) grades 7-12, and (c) college students. The instrument is self-report. The forms have 70-80 items and take 15-40 minutes to administer. Technical information looks good.

(TC# 223.3DIMOFS2)

Epstein, Joyce L., Lori J. Connors, and Karen Clark Salinas. *Surveys of School and Family Partnerships—Questionnaires for Teachers, Parents, and Students*, 1992. Available from: The Johns Hopkins University, Center on Families, Communities, Schools and Children's Learning, Baltimore, MD 21218.

This document includes two versions of surveys for teachers, parents, and students in grades 10-12. Surveys contain about 60 questions. The teacher survey focuses exclusively on parent involvement; the parent survey asks about general attitude toward school, communication, and information they would like to receive; and the student survey asks about general attitude toward school, parental involvement, student input, and relationships with teachers. Only the

surveys are included. Not included are administration and scoring instructions, nor technical information.

(TC# 140.4SURSCF)

Evans, R. Lynn, Chad D. Ellett, Rita R. Culross, et al. ***Development of a Student Perceptions Instrument to Assess Contributions of the Learning Environment to the Enhancement of Student Learning in Higher Education Settings.*** **Located in: Darrell L. Fisher (Ed.), The Study of Learning Environments, Volume 8, 1994, pp. 72-80. Available from: Darrell L. Fisher, Science and Mathematics Education Centre, Curtin University of Technology, GPO Box U1987, Perth, Western Australia 6001.**

This paper describes the development of the *Student Assessment of Teaching and Learning* survey designed to assess contributions of the learning environment to the enhancement of student learning in higher education. The survey has four subscales: (1) preparation and classroom management, (2) interpersonal skills, (3) enhancement of learning, and (4) student evaluation practices. Enough of the instrument is included in the paper to reproduce its orginal form. Some technical information is included.

(TC# 110.4DEVSTP)

Fisher, Darrell L., ed. ***The Study of Learning Environments, Volume 8,*** **1994. Available from: Darrell L. Fisher, Science and Mathematics Education Centre, Curtin University of Technology, GPO Box U1987, Perth, Western Australia 6001.**

This book contains a number of papers on learning environments. Topics include: examples of school and classroom climate assessment instruments, instruments for assessing teacher motivation and professional environment, and research using various instruments to explore the climates of various settings. Examples of actual instruments are also included as separate entries on this bibliography.

(TC# 110.4STULEE)

Fraser, Barry J., Geoffrey J. Giddings, and Campbell J. McRobbie. ***Assessing the Climate of Science Laboratory Classes.*** **Located in: Barry J. Fraser, Ed., Research Implications for Science and Mathematics Teachers, Volume 1, 1993, Chapter 8, pp. 41-50. Available from: National Key Centre for School Science and Mathematics, Curtin University of Technology, GPO Box U 1987, Perth, Western Australia 6001, (09) 351-7896, fax: (09) 351-2503, e-mail: NTANNERTD@cc.curtin.edu.au Also available from ERIC: ED 370 767.**

The authors describe the *Science Laboratory Environment Inventory* for use in grades 9-college. There are 35 survey questions in 5 categories: student cohesiveness, open-

endedness, integration between the lab and non-lab portion, rule clarity, and material environment. The paper includes the survey and some technical information.

(TC# 600.4ASSCLS)

Fraser, Barry J., Geoffrey J. Giddings, and Campbell J. McRobbie. *Evolution and Validation of a Personal Form of an Instrument for Assessing Science Laboratory Classroom Environments.* Located in: Journal of Research in Science Teacher, Vol. 32, 1995, pp. 399-422.

The *Science Laboratory Environment Inventory (SLEI)* was developed to elicit: (1) students' perceptions of the class as a whole, and (2) each student's perception of his or her own role within the classroom. The authors wanted to tailor instruments to science laboratory classes, and wanted to improve the ability of instruments to detect the differences in perceptions between individuals or subgroups within the class. Each form of the *SLEI* has 35 questions organized into five subscales: student cohesiveness (the extent to which students know, help, and are supportive of one another), open-endedness (the extent to which the laboratory activities emphasize an open-ended, divergent approach to experimentation), integration (the extent to which the laboratory activities are integrated with nonlaboratory and theory classes), rule clarity (the extent to which behavior in the laboratory is guided by formal rules, and material environment (the extent to which the laboratory equipment and materials are adequate). Each question, such as "My laboratory class is rather informal and few rules are imposed on me," is answered on a five-point scale, from "almost never" to "very often."

The paper includes a good deal of technical information; the instrument was field-tested with 5,447 students in 269 high schools and university classes in six countries.

(TC# 600.3EVOVAP)

Fraser Barry J., and Henrietta Hoffman. *Combining Qualitative and Quantitative Methods In A Teacher-Researcher Study Of Determinants Of Classroom Environment and Classroom Environment Questionnaire*, April 1995. Available from: Barry J. Fraser, Curtin University of Technology, GPO Box U1987, Perth 6001, Australia.

This paper describes the use in three 8-10th grade science classrooms of the *Classroom Environment Questionnaire (CEQ)*, an instrument designed to define the characteristics of teachers using a constructivist theory of learning to plan instruction. The purpose of the study was to enable participating teachers to self-reflect on their own instructional practice. The *CEQ* has 84 questions designed to obtain information from students on seven dimensions of classroom climate: *Personal Relevance* (relevance of learning to students' lives), *Critical Voice* (the extent to which students can express a critical opinion), *Shared Control* (student participation in planning, conduct and assessment of learning), *Uncertainty* (the extent to which students know that science knowledge is always provisional), *Student Negotiation* (the extent to which students discuss the believability of new ideas), *Commitment* (student

motivation and effort in relation to learning science), and *Teacher Support* (helpfulness and friendliness of the teacher towards students). Some technical information is included.

(TC# 100.4COMQUQ)

Germann, Paul J. *Development of the Attitude Toward Science in School Assessment and Its Use to Investigate the Relationship Between Science Achievement and Attitude Toward Science in School.* Located in: Journal of Research in Science Teaching 25, 1988, pp. 689-703.

The *Attitude Toward Science in School Assessment* (ATSSA) survey is based on a theoretical model which not only attempts to distinguish between different aspects of "attitude" but also additional factors that affect behavior. The ATSSA has 14 statements such as, "Science is fun"; students indicate their degree of agreement with the statement. The paper presents the results of several studies using the instrument with students in grades 7-10. As a result of the studies, the author concludes that, "The ATSSA is a valid and reliable instrument that can be useful in sorting out the relationships between variables that affect achievement and attitude. School departments, science departments, and classroom teachers can use this assessment to monitor general attitude toward science in school among the students in their instructional programs."

(TC# 210.3DEVATT)

Glazer, Susan Mandel, and Carol Smullen Brown. *Portfolios and Beyond: Collaborative Assessment in Reading and Writing*, 1993. Available from: Christopher-Gordon Publishers, Inc., 480 Washington St., Norwood, MA 02062, (617) 762-5577.

The authors of this book state their purpose as clarifying assessment procedures that parallel and support a more holistic approach to language arts instruction in grades 10-12. The book has some good ideas on the following topics:

1. The type of classroom environment that is necessary to support this instructional model: a student-centered environment that allows students to read and write for real reasons, develop a community of learners, be comfortable taking risks, and share control of learning.

2. A self-assessment checklist for evaluating a "literacy environment" that focuses on supplies and room arrangement. It does not include instructional approaches, although there is a section on how to manage a "student-centered" classroom.

3. Information to help students self-reflect, self-assess, and control their own learning, including self-evaluation checklists and open-ended questions.

4. The need for ways to more formally summarize and report progress. There are chapters on writing and reading. The writing chapter has progress summary forms and developmental continuums; the reading chapters cover think-alouds and retelling. There is also help with

how to do them and what to look for in student responses. (This is frequently left out of whole-language books.)

5. Information to help interact with parents.

6. Practical help with finding time, storing work, etc.

Lots of student work is included. Technical information is not included.

(TC# 400.6PORBEY)

***Glendale School Effectiveness Survey, The*, 1993. Available from: Marc S. Becker, Glendale Union High School District, Administrative Center, 7950 N. 43rd Ave., Glendale, AZ 85301, (602) 435-6052.**

The *Glendale School Effectiveness Survey* is a package of four surveys: Faculty, Student, Parent, and Support Staff. The Surveys ask questions such as, "How often have the following persons made formal or informal observations of your classroom instruction this year?" The faculty survey is composed of 200 questions and covers the following categories:

- *Educational Leadership*: the quality of interaction between administration and staff
- *High Expectations*: the level of teacher expectations and philosophy of student learning
- *Faculty Commitment*: the quality of interaction and commitment among faculty
- *Positive Climate*: the existence of a safe environment for students and staff
- *School Partnership*: the quality of communication and interaction between parents and staff
- *Frequent Monitoring*: the frequency and type of student assessment
- *Essential Skills*: the criteria used in conducting student assessment
- *School Purpose*: the level of dissemination of the school's vision statement

The student, parent, and support staff surveys consist of 121, 66, and 76 questions, respectively. No technical information or discussion of student grade levels is provided with the surveys.

(TC# 100.4GLEEFS2)

Gresham, Frank M., and Stephen N. Elliott. *Social Skills Rating System (SSRS)—Manual*, 1990. Available from: American Guidance Service, Publishers' Building, Circle Pines, MN 55014.

The *SSRS* was designed to provide a broad, multi-rater (teacher, parent and student) assessment of student (grades 1-12) social behaviors that can affect teacher-student relations, peer acceptance, and academic performance. The *SSRS* surveys have around 40 questions, have several levels depending on grade, and generate information on: cooperation, making friends, taking responsibility, showing empathy for others, and self-control. There is a lot of assistance with scoring and using results, and linking assessment to intervention. There is extensive technical information and norms.

(TC# 200.3SOCSKR)

Grossnickle, Donald R., Thomas J. Bialk, and Beverly C. Panagiotaros. *The School Discipline Climate Survey: Toward a Safe, Orderly Learning Environment.* Located in: NASSP Bulletin 77, November 1993, pp. 60-66.

The *School Discipline Climate Survey (SDCS)* attempts to obtain school staff opinions on 13 major discipline program components: attendance policies, discipline policies, staff training, communication, efficiency, parent support, due process-consistency, safe and secure environment, discipline teamwork, learning climate, strategic planning, penalties and consequences, and instructional management. The survey has 54 statements such as, "The staff systematically identifies discipline training needs." Respondents rate both degree of importance of each statement and current degree of satisfaction. This allows users to determine the greatest discrepancies betweeen importance and current satisfaction. No technical studies were undertaken on the reliability or validity of this instrument; therefore, we recommend that it only be used informally.

(TC# 110.3SCHDIC)

Guglielmino, L. M. *Self-Directed Learning Readiness Scale (SDLRS)*, 1977. Available from: Guglielmino & Associates, 734 Marble Way, Boca Raton, FL 33432, (407) 392-0379.

The *SDLRS* is a self-report instrument consisting of 58 items which assess how an individual likes to learn and how they feel about learning. Norms have been developed for adults and children.

(TC# 223.3SELDIL)

Halderson, Cynthia. ***Comprehensive Assessment of School Environments—School Climate Survey*****, 1987. Available from: National Assn. of Secondary School Principals (NASSP), 1904 Association Dr., Reston, VA 22091.**

This instrument collects satisfaction information from students (grades 6-12), teachers, and parents in 10 areas: teacher-student relationships, security and maintenance, administration, student academic orientation, student behavior values, guidance, student-peer relationships, parent and school relationships, instructional management, and student activities. Surveys are 46-58 questions long. Extensive technical information is included.

(TC# 100.4COMASO)

Harter, Susan. ***Manual for the Self-Perception Profile for Children*****, 1985. Available from: The University of Denver, Department of Psychology, 2040 S. York St., University Park, Denver, CO 80208, (303) 871-2478.**

This survey is designed for grades 3-6, has 36 questions completed by the student, and attempts to measure the following: scholastic competence, social acceptance, athletic competence, physical appearance, behavioral conduct, and global self-worth. The global self-worth area covers the extent to which the child likes himself/herself as a person. This instrument is one of the better ones in terms of theoretical background, research studies, and technical information.

(TC# 223.3SELPEP1)

Harter, Susan. ***Self-Perception Profile for Adolescents*****, 1986. Available from: The University of Denver, Department of Psychology, 2040 S. York St., University Park, Denver, CO 80208, (303) 871-2478.**

This instrument extends the *Self-Perception Profile for Children* (Harter, 1985) to adsolescents. It attempts to assess: (1) scholastic competence, (2) social acceptance, (3) athletic competence, (4) physical appearance, (5) job competence, (6) romantic appeal, (7) conduct/morality, (8) close friendship, and (9) global self-worth. There are 45 items. Technical information is adequate.

(TC# 223.3SELPEP2)

Honey, Peter, and Alan Mumford. ***Learning Styles Questionnaire*****, 1989 (revised). Available from: Organization Design and Development, Inc., 2002 Renaissance Blvd., Suite 100, King of Prussia, PA 19406, (215) 279-2002.**

The *Learning Styles Questionnaire* (*LSQ*) is an 80-question survey for self-study of preferred learning style(s), called the activist, reflector, theorist, and pragmatist. Typical profiles of people from various professions are provided for comparison. There is quite a bit of help with

choosing learning activities that suit one's style, making best use of one's strengths, and how to improve various styles. The instrument appears designed for older students and adults. Little technical or theoretical information is included.

(TC# 223.3LEASTQ)

Howard, Eugene, and James W. Keefe. *Comprehensive Assessment of School Environments (CASE)*, 1986 and 1991. Available from: National Association of Secondary School Principals (NASSP), 1904 Association Dr., Reston, VA 22091, (703) 860-0200.

The *CASE-IMS* is a school profiling and planning software package for grades 4-12. The package consists of:

- *School Climate Survey* (55 items) to assess perceptions of students, teachers, and parents about 10 characteristics of the school.
- *Teacher Satisfaction Survey* (56 items) to measure teacher perceptions on nine dimensions of job satisfaction.
- *Student Satisfaction Survey* (46 items) to collect data on eight dimensions of student satisfaction with school.
- *Parent Satisfaction Survey* (58 items) to assemble parent perceptions on nine dimensions of school operation and services.
- *Principal Questionnaire* (98 items) to assemble information regarding the school or district.

No technical information is included.

(TC# 100.4COMASO)

Hynes, Michael C. *K-5 Mathematics Program Evaluation—School Handbook*, 1993. Available from: Florida Model Curriculum Project, Florida Department of Education, 325 Gaines St., Tallahassee, FL 32399, (904) 487-1785.

This handbook was prepared for Florida's public school districts as a tool for evaluating K-5 mathematics programs. Assessment devices include a curriculum survey, school and classroom climate instruments, and student achievement tasks. The portions most relevant for this bibliography are: (1) a teacher-completed program support survey, (2) classroom learning environment surveys for teachers, students and outside observers, (3) an instructional resources survey completed by district staff, and (4) equal access surveys completed by teachers, parents, and students. The classroom learning environment surveys emphasize current thinking about use of manipulatives and calculators, and student exploratory study to

construct their own meaning. There is no assistance with interpretation and use of results. No technical information is included.

(TC# 500.3K-5MAP)

Illinois State Board of Education. *Illinois Goal Assessment Program: Reading—Assessment Summary and Sample Reading Passages*, 1993; and *The Illinois Reading Assessment: Classroom Connections*, Revised 1994. Available from: Illinois State Board of Education, Department of School Improvement Services, School and Student Assessment Section, 100 N. 1st St., Springfield, IL 62777, (217) 782-4321.

In the *IGAP* reading test, "Each student reads two passages, one narrative (story-type) and one expository (informational-type) and answers questions that accompany each passage. Most questions test the students' understanding of the passage they read. Two questions that precede each passage assess students' familiarity with the topic of the passage. Two questions at the end assess students' knowledge of reading strategies. A set of short survey items that sample students' experiences in four reading and writing areas completes the assessment. The *IGAP* reading test uses a multiple-correct answer format. Each question (except the survey items) may have one, two, or three correct answers."

This document contains sample assessment materials from grades 3, 6, 8, and 10 (1993) and a general overview of the assessment procedure (1994).

(TC# 440.3ILLGOR3)

Keefe, James W., and John S. Monk. *Learning Style Profile (LSP)*, 1986. Available from: National Association of Secondary School Principals, 1904 Association Dr., Reston, VA 22091.

The *Learning Style Profile* is intended to help teachers identify student (grades 6-12) learning style strengths and weaknesses to organize instruction more efficiently and effectively. The 126 questions provide information on 23 skills and preferences such as: analytic skill, spatial skill, memory skill, visual v. auditory learning, persistence, willingness to take risks, study time preferences, grouping preference, and preferences for the physical surroundings (sound, movement, temperature, lighting, etc.). There is assistance with scoring, but little help with using the results. There is a great deal of technical information.

(TC# 223.3LEASTP)

Kloosterman, Peter, and Frances K. Stage. *Measuring Beliefs About Mathematical Problem Solving*. Located in: School Science and Mathematics 92, March 1992, pp. 109-115.

The authors describe the development of a scale to assess student beliefs about mathematics. The instrument, designed for grades 7+, is called the *Indiana Mathematics Beliefs Scale*.

Thirty-six questions cover six beliefs: (1) I can solve time-consuming mathematics problems. (2) There are word problems that cannot be solved with simple, step-by-step procedures. (3) Understanding concepts is important in mathematics. (4) Word problems are important in mathematics. (5) Effort can increase mathematical ability. (6) Mathematics is useful in daily life. The paper includes technical information based on studies with college students.

(TC# 500.3MEABEM)

Kneidek, Tony, Ed. *Northwest Policy*, November 1995. Available from: Northwest Regional Educational Laboratory, 101 SW Main St., Suite 500, Portland, OR 97204, (503) 275-9500, fax: (503) 275-9489.

The authors list 11 guiding principles for a developmental, student-centered classroom in action. They provide indicators for 2 of the 11 principles and note where indicators of the other 9 principles can be found. No technical information is included.

(TC# 100.4STUMIV)

Ladwig, James G., and M. Bruce King. *Restructuring Secondary Social Studies: The Association of Organizational Features and Classroom Thoughtfulness.* Located in: American Educational Research Journal 29, Winter 1992, pp. 695-714.

The authors report on a study in which they attempted to determine the extent to which school restructuring (e.g., flexible class length, increased preparation time for teachers, and opportunities for collegial planning) affects classroom thoughtfulness. They found that restructuring, per se, doesn't automatically affect classroom thoughtfulness. It has to be combined with curricular and instructional changes. For example small class sizes and extended class periods can facilitate implementation of a curriculum that emphasizes exploration by students of fundamental questions and thoughtful discourse.

This paper is included on the bibliography because an appendix includes the instrument the authors used to assess classroom thoughtfulness. Each class is observed at least five times and rated on six features: (1) there was sustained examination of a few topics rather than superficial coverage of many; (2) the lesson displayed substantive coherence and continuity; (3) students were given an appropriate amount of time to think and prepare responses to questions; (4) the teacher asked challenging questions and/or structured challenging tasks; (5) the teacher was a model of thoughtfulness; and (6) students offered explanations and reasons for their conclusions.

(TC# 700.4RESSES)

Likert, Jane Gibson, and Rensis Likert. *The Profile of a School*, 1987. Available from: Rensis Likert Associates, Inc., 3001 S. State St., Suite 401, Ann Arbor, MI 48104, (313) 769-1980.

The *Profile of a School* is a set of questionnaires for school staff, parents, and students (grades 4-12). Surveys range from 9 (students in grades 4-6) to 104 questions (superintendents) that ask about things such as: school and classroom climate, leader support, goal emphasis, team building, work facilitation, technical competence, communication, peer interactions, self-motivation, and employee satisfaction. Surveys and much technical information is included.

(TC# 130.3PROOFA)

Lorr, Maurice. *Interpersonal Style Inventory (ISI)*, 1986. Available from: Western Psychological Services, Publishers and Distributors, 12031 Wilshire Blvd., Los Angeles, CA 90025, (310) 478-2061.

The *ISI* tries to measure an individual's characteristic way of relating to other people, style of impulse control, and modes of dealing with work and play. The *ISI* contains 300 true-false statements for use with individuals 14 years of age and older and covers five broad areas of personality: *interpersonal involvement*—sociable, help seeking, nurturing, sensitive; *socialization*—conscientious, trusting, tolerant; *autonomy*—directive, independent, rule free; *self-control*—deliberate, orderly, persistent; *stability*—stable, approval seeking. The survey can be computer administered and scored. Norms have been developed and other technical information is available.

(TC# 220.3INTSTI)

Marsh, Herbert W. *Self-Description Questionnaire-II—SDQ, Manual* and *Scoring and Profile Booklet*, 1990. Available from: University of Western Sydney, Macarthur, PO Box 555, Campbelltown, NSW 2560, Australia.

This survey is designed for grades 4+. It has subtests covering one's self-concept in the area of physical self, peer relationships, parent relationships, reading, mathematics, and general school. At the time of this review, there was limited available information on this instrument in the Test Center.

(TC# 210.3SELDEQii)

McKenna, Michael, and Dennis Kear. *Measuring Attitude Toward Reading: A New Tool for Teachers*. Located in: The Reading Teacher 43, May 1990, pp. 626-639.

This paper reports on the development of the *Elementary Reading Attitude Survey* for use in grades 1-6. There are 20 items, 10 on academic reading and 10 on recreational reading.

Students read each question (such as "How do you feel about spending free time reading?") and then indicate their response by circling one of four Garfield cartoon characters drawn to show different levels of excitement or boredom.

The complete instrument, along with administration instructions and norms (based on 18,000 students) are included. Some reliability and validity information is also given. As with other measures of this type, estimating validity is problematic because it involves identifying other measures of attitude with which to compare self-ratings. In this case, the authors compared self-ratings to whether or not the student had a library card, the number of books currently checked out, amount of television watched, and holistic teacher ratings of student ability. Because of the inherent conceptual problems here, the instrument is best used informally.

(TC# 440.3MEATOR)

National Study of School Evaluation. ***Teacher Opinion Inventory, Parent Opinion Inventory, Student Opinion Inventory,*** **and** ***Community Opinion Inventory.*** **Available from: National Study of School Evaluation, 5201 Leesburg Pike, Falls Church, VA 22041, (703) 820-2727, fax: (703) 820-0749.**

These surveys are designed for grades 5-12, contain 38-66 questions, and elicit opinions about the following types of things: organization/administration, instruction, student support climate, school-community relationships, student activities, satisfaction, student-staff relationships, classroom climate, responsiveness to the community, and resource stewardship. Included are complete surveys, scoring instructions, and some technical information.

(TC# 100.4STUTEA)

Newmann, Fred M., Walter G. Secada, and Gary G. Wehlage. ***A Guide to Authentic Instruction and Assessment: Vision, Standards and Scoring,*** **1995. Available from: Wisconsin Center for Educational Research, School of Education, University of Wisconsin, 1025 W. Johnson St., Madison, WI 53706, (608) 263-4200.**

The authors' premise is that innovative teaching techniques (e.g., cooperative learning, group discussions, hands-on experiments and videos) do not guarantee a change in the "intellectual quality" of what students are asked to do. For example, "a portfolio that shows a variety of student work over a semester might replace the final exam taken in one sitting, but the portfolio itself could be filled with tasks" devoted to remembering and listing isolated bits of information. Thus, the merit of any teaching technique should be judged by its ability to improve the "intellectual quality of student performance."

The paper is devoted to defining "intellectual quality" and developing criteria for judging the intellectual quality of the school work students are asked to perform, for judging the quality of assessment tasks, and for assessing the intellectual quality of student work. The criteria are designed for use in *any* content area and thus serve to define delivery and performance standards across the curriculum and across teaching methods. Specific examples of the

criteria are provided in math and social studies. Some samples of student work are included. Some technical information is also included. I like this one.

(TC# 050.3GUIAUI)

Nichols, Clarence E., and Rochelle E. Nichols. *Dropout Prediction and Prevention*, 1990. Available from: Clinical Psychology Publishing Company, Inc., 4 Conant Square, Brandon, VT 05733, (800) 433-8234 or (802) 247-6871, fax: (802) 247-6853.

This dropout prediction scale was designed to require no interviews, be simple to use, be short, and be accurate. It makes predictions about the likelihood that individual students in grades 8-12 are at risk for dropping out based on information such as: attendance, years repeated, GPA, suspensions, parent education level, student health, and family size. Several studies were conducted to relate answers to these questions to students who actually did or did not drop out. The complete instrument, administration instructions, and scoring instructions are included in the booklet. There are also suggestions for designing prevention programs.

(TC# 220.3DROPRP)

Nicholls, John G., Paul Cobb, Erna Yackel, et al. *Students' Theories About Mathematics and Their Mathematical Knowledge: Multiple Dimensions of Assessment.* Located in: Assessing Higher Order Thinking in Mathematics, Gerald Kulm (Ed.), 1990. Available from: American Association for the Advancement of Science, 1333 H St. NW, Washington, DC 20005, (301) 645-5643.

This paper reports on a series of studies on student attitudes toward mathematics and their relationship to mathematical knowledge and understanding. Dimensions of attitudes toward math were:

1. How motivated students are to do math
2. Student beliefs about what causes success in math
3. Student views of the benefits of learning math

All items are included.

(TC# 500.3STUTHA)

Oakland, Thomas, Joseph J. Glutting, and Connie B. Horton. *Student Styles Questionnaire*, 1996. Available from: The Psychological Corporation, Order Service Center, PO Box 839954, San Antonio, TX 78283, (800) 228-0752, fax: (512) 270-0327.

According to the authors, "The *Student Styles Questionnaire (SSQ)* is not a measure of pathology, weakness, or deficiency. Rather, it is designed to detect individual differences students display in their preferences, temperaments, and personal styles. The *SSQ* helps identify the ways students prefer to gain energy and direction, gather and integrate information, make decisions, and generally orient their lives. The *SSQ* measures students' preferences for the following styles: extroverted, introverted, practical, imaginative, thinking, feeling, organized, and flexible." The authors use a survey of 69 questions to identify a student's preferred learning style—one of 16 combinations of the 8 basic styles. The authors provide lots of guidance on how to set up productive learning experiences for students exhibiting each style. A great deal of technical work has been conducted with this instrument to ensure its reliability and validity.

(TC# 223.3STUSTQ)

O'Brien, Edward J., and Seymour Epstein. *MSEI—The Multidimensional Self-Esteem Inventory, Professional Manual*, 1988. Available from: Psychological Assessment Resources, Inc., PO Box 998, Odessa, FL 33556, (813) 968-3003.

This self-report instrument is designed for college students or students with at least a tenth-grade reading level. Responses are made using 5-point scales which ask the degree or frequency with which an item applies to the respondent. The theory underlying the instrument proposes that elements of self-esteem are structured in levels. At the highest level is global self-esteem which refers to the most general evaluation of self-worth. At an intermediate level, components of self-esteem are more specific to particular life experiences such as likability, self-control, personal power, and appearance. At lower levels, elements exist which have little influence on global self-esteem and are situation-specific. The instrument has "good" reliability. There is some evidence of validity. The underlying theory is interesting, and practitioners may want to explore this multidimensional approach to measuring self-concept.

(TC# 223.3MULDIS)

Offer, D., E. Ostrov, K. I. Howard, et al., 1992. *Offer Self-Image Questionnaire, Revised (OSIQ-R)*. Available from: Western Psychological Services, Publishers and Distributors, 12031 Wilshire Blvd., Los Angeles, CA 90025, (310) 478-2061 or (800) 648-8857.

The *OSIQ-R* is a 129-question personality inventory that is designed to measure self-image of adolescents 13 to 18 years of age in twelve areas: emotional tone, impulse control, mental health, social functioning, family functioning, vocational attitudes, self-confidence, self-reliance, body image, sexuality, ethical values, and idealism. In addition to these 12 scales,

overall self-image is given by the total self-image scale, which combines scores across the 10 most significant component scales. Administration of the *OSIQ-2* can be online. Norms have been developed based on a reference group of 964 adolescents, and there is extensive technical information.

(TC# 223.3OFFSE13)

Organizational Analysis & Practice, Inc. *School Climate Survey*, *Support Staff Climate Survey*, and *Student Opinion Survey*, 1989. Available from: Organizational Analysis & Practice, Inc., 306 E. State St., #230, Ithaca, NY 14850, (607) 273-3033.

The school staff and teacher surveys contain almost 200 questions and are designed for any grade level. Questions ask opinions about things like: school priorities, working conditions, resources, supervision, professional development, personnel evaluation, teamwork/coordination, decisionmaking, and overall satisfaction. The student survey is designed for students in grades 9-12 and has over 100 questions that ask about expectations/rules, attitude toward school, attitude toward teachers, attitude toward peers, and what is gotten out of school. We only have the surveys; we don't have scoring procedures, help with interpretation and use, or technical information.

(TC# 100.4SCHCLSU)

Ostlund, Karen L. *Sizing Up Social Skills*. Located in: Science Scope, March 1992, pp. 31-33.

This short article by a classroom teacher describes teaching students the social skills important for cooperative learning (such as moving into groups quietly, taking turns, encouraging everyone to participate, avoiding put-downs, asking for help when needed, etc.). These skills are grouped into four general areas: listening, responsibility, respecting others, and staying on task. Each student work group gets a rating scale (included in the article). Whenever students engage in a positive behavior the teacher awards points on the scale; when students do not engage in the appropriate social skills, the teacher explains what should be done differently and deletes points. No technical information is included.

(TC# 223.6SIZUPS)

Pechman, Ellen M. *MAP: Mathematics Assessment Process for the Middle Grades, User's Manual, Volume I* and *II*, October 1991. Available from: Center for Research in Mathematics and Science Education, North Carolina State University, 315 Poe Hall, Suite 310, Raleigh, NC 27695. Also available from: Dyntel Corporation, 7420 Fullerton Rd., Suite 110, Springfield, VA 22153, (800) 443-3742, (703) 440-1400, fax: (703) 440-1408, Internet: edrs@inet.ed.gov (ED# Vol. 1: 359 020 and Vol. II: 359 021).

The *MAP* criteria for excellence include 5-9 descriptors of each: problem-centered curriculum, instruction that promotes mathematical exploration and reasoning, instruction emphasizing thinking processes, instruction meeting developmental diversity, positive attitudes toward math, relevance of instruction, collegiality among faculty, involvement among parents and the community, and quality assessments. The documents include the following instruments for gathering information in these areas: *Mathematics Teacher Interview, Administrator Interview, Faculty Interview, Parent Interview, Student Interview, Mathematics Classroom Observation, Schoolwide Observation, Mathematics Teacher Survey, Materials and Facilities Survey*, and *Statistical Profile*. Training activities, but no technical information, are included.

(TC# 100.4MAPMAA)

Piers, Ellen V. *Piers-Harris Children's Self-Concept Scale*, 1984 (revised). Available from: Western Psychological Services, Publishers and Distributors, 12031 Wilshire Blvd., Los Angeles, CA 90025, (310) 478-2061 or (800) 648-8857.

The *Piers-Harris Children's Self-Concept Scale* is also referred to as "The Way I Feel About Myself." The author defines self-concept as a "relatively stable set of self-attitudes reflecting both a description and an evaluation of one's behavior and attributes." It focuses on children's self-report of self-perceptions (rather than inferences from behaviors or observations) in six areas: (1) behavior, (2) intellectual and school status, (3) physical appearance and attributes, (4) anxiety, (5) popularity, and (6) happiness and satisfaction. The 30-minute instrument has 80 questions and is designed for individuals aged eight to eighteen. The survey can also be given on-line. The author recommends that users be trained, and that the instrument be given under the supervision of a qualified professional. There is extensive technical information.

The author states a reasonable caution about this instrument that also applies to other self-report devices: "Scores are subject to conscious and unconscious distortions by children, usually in the direction of more socially desirable responses." Additionally, care should be taken in interpreting scores for individuals who differ from the norm sample, such as African-American and some poor children.

(TC# 223.3PIEHAC)

Pomeroy, Deborah. ***Implications of Teachers' Beliefs About the Nature of Science: Comparison of the Beliefs of Scientists, Secondary Science Teachers, and Elementary Science Teachers.*** **Located in: Science Education 77, June 1993, pp. 261-278.**

The author reports on a study that asked the question: "Are there differences between how scientists and teachers view the nature of science, scientific methodology, and related aspects of science education?" She developed a 50-item survey which covered: (1) the nature of scientific inquiry—is the only valid way of gaining scientific knowledge through inductive methods using controlled experimentation, or is there a role, as more contemporary views have it, for dreaming, intuition, play, and inexplicable leaps? (2) what K-12 science education should be like, and (3) background information on respondents. The complete survey and discussion of the results are included in the article.

(TC#600.4TEABEA)

Rhodes, Lynn K., ed. ***Literacy Assessment—A Handbook of Instruments,*** **1993. Available from: Heinemann, A Division of Reed Publishing Inc., 361 Hanover St., Portsmouth, NH 03801, (603) 431-7894.**

This document includes a series of information-gathering instruments for elementary students in the following areas: reading attitudes, comprehension strategies, miscues, writing attitudes, spelling, and student self-assessment. It also includes a form for observing whole language teaching. Most examples are teacher developed. Some are more complete than others (e.g., they include the instrument and help with scoring/analysis). There is no context setting in the sense of describing current thinking about goals for students and how the instruments fit in. Therefore, it requires knowledgeable teachers who already have a sense of what information they want to collect, why they want it, and how to use it. The document looks like something appropriate for beginners but, in actuality, it requires knowledgeable users to use it well. There is a good bibliography of developmental continuums. No technical information is included.

(TC# 400.3LITASH)

Riggs, Iris M., and Larry G. Enochs. ***Toward the Development of an Elementary Teacher's Science Teaching Efficacy Belief Instrument,*** **1989. Available from: ERIC ED 308 068.**

This publication reports on a study in which the *Personal Science Teaching Efficacy Belief Scale* and the *Science Teaching Outcome Expectancy Scale* were administered to measure teacher feelings of self-efficacy and outcome expectancy. The authors present evidence that the combined instrument is valid for studying elementary teachers' beliefs toward science teaching and learning. The instrument is included.

(TC#600.4TOWDEE)

Ryan, Peter. ***Teacher Perspectives of the Impact and Validity of the Mt. Diablo Third Grade Curriculum-based Alternative Assessment of Mathematics (CBAAM)*****, September 1994. Available from: WestEd, 730 Harrison St., San Francisco, CA 94107, (415) 565-3000.**

This report discusses the impact of math assessment reform in a California school district. The research looked at impact on the instruction delivered by third grade teachers, teacher professional development, and teacher attitudes. Results of the survey and interviews showed that the assessment has an impact on changing instruction (both content and process), legitimizing changes teachers had already made, communicating with parents, and teacher self-reflection. Included in the report are the 1994 third grade assessment booklet, and the teacher survey and interview forms. Some technical information is included.

(TC# 500.3TEAPEI)

Secada, Walter G., Sherian Foster, and Lisa Byrd Adajian. ***Intellectual Content of Reformed Classrooms.*** **Located in: NCRMSE Research Review 4, Winter 1995, pp. 3-8. Available from: National Center for Research in Mathematical Sciences Education, Wisconsin Center for Education Research, University of Wisconsin, 1025 W. Johnson St., Madison, WI 53706, (608) 263-7582, fax (608) 263-3406.**

As part of a study on reform in mathematics education, the authors are developing a classroom observation form containing indicators of the classroom's "intellectual substance." There are 10 scales intended to describe a lesson's content in terms of teacher and student behavior, student engagement, and the shared norms of the class revealed through the interaction patterns of the class. The 10 scales are:

- *Mathematical Concepts*—the content of the lesson
- *Use of Mathematical Analysis*—student engagement in analytical math beyond rote uses of algorithms, e.g., searching for math patterns, making math conjectures, or justifying conjectures
- *Depth of Knowledge and Student Understanding*—the depth of student knowledge being developed in a lesson
- *Mathematical Connections*—to the real world
- *Cross-Disciplinary Connections*
- *Value Beyond the Class*
- *Mathematical Discourse and Communication*—the degree to which talking is used to understand math
- *Locus of Mathematical Authority*—the extent to which authority is shared with students

- *Social Support for Student Achievement*—conveying high expectations
- *Student Engagement in Doing Mathematics*—student motivation

The article includes a description of the scales and a sample classroom example but no detail on scoring and no technical information.

(TC# 500.4INTCOR)

Skaalvik, Einar M., and Richard J. Rankin. *A Test of the Internal/External Frame of Reference Model at Different Levels of Math and Verbal Self-Perception.* Located in: American Educational Research Journal 32, Spring 1995, pp. 161-184.

The authors report a study in which they looked at the relationship between math and verbal achievement and several different measures of motivation. The measures of motivation included a modified version of the *Self-Descriptive Questionnaire-II* (not included in the paper), and math (or verbal) self-concept, self-perceived aptitude, self-perceived ability to learn, intrinsic motivation, effort, and anxiety. The latter 74 questions are included in the paper. The authors found a strong relationship between the affective measures and student achievement. Some technical information is included.

(TC# 500.3TESINE)

Smist, Julianne M., Francis X. Archambault, and Steven V. Owen. *Gender Differences in Attitude Toward Science*, 1994. Available from: Julianne M. Smist, Biology/Chemistry Department, Springfield College, Springfield, MA 01109.

The authors report a study to determine how the *Test of Science-Related Attitudes* (TOSRA), developed in Australia, works with American high school students. The TOSRA has 70 questions that cover students' attitudes toward science, preference for experimentation, social implications of science, normality of scientists, attitude toward science classes, and openness to new ideas. The authors conclude that the TOSRA is a valid and reliable instrument for use with American students. TOSRA questions, and the subscales they relate to, are included, but are not formatted for immediate use. Lots of technical information is available.

(TC# 600.3GENDIA)

Soares, Anthony T., and Louise M. Soares. *The Self-Perception Inventory (SPI)*, 1985 Revised Edition. Available from: Soares Associates, 111 Teeter Rock Rd., Trumbull, CT 06611, (203) 375-5353.

The *SPI* measures four aspects of self-perception: (1) self-concept, (2) ideal self-concept, (3) reflected self-concept as perceived by teachers, and (4) reflected self-concept as perceived by parents. There are four *SPI* forms: (1) students in grades 1-12, (2) adults, (3) teachers,

and (4) nurses. The authors state that the primary purpose of the *SPI* is research, although other uses such as counseling may be relevant. It takes 5-20 minutes depending on age and reading ability. The technical information that is included looks good.

The authors note a caution which is generally applicable to the measurement of self-concept—self-concept ratings may differ somewhat depending on who is doing the rating. Specifically, parent ratings of the child's self-concept are often similar to the child's self-rating, while teachers' ratings often differ from the child's self-rating and peer ratings generally fall somewhere in between. The instrument has been used in a variety of settings. The manual provides an extensive bibliography including studies with disadvantaged children.

(TC# 223.3SELPEI)

Stephens, Thomas M., and Kevin D. Arnold. *Social Behavior Assessment Inventory (SBAI)*, 1992. Available from: Psychological Assessment Resources, Inc., PO Box 998, Odessa, FL 33556, (800) 331-8378.

The *SBAI* is a teacher-based rating instrument that was designed to measure the performance level of social behaviors of students (grades K-9) in the classroom: environmental (care for the environment, dealing with emergency, etc.), interpersonal (accepting authority, coping with conflict, gaining attention, helping others, making conversation, playing, etc.), self-related (accepting consequences, expressing feelings, self-concept, taking responsibility, etc.), and task-related (attending, completing tasks, following directions, independent work, on-task behavior, etc.) behaviors. The author states that it is intended mostly for special education and counseling uses to identify behavioral targets for corrective training. The teacher rates 120 behaviors on a scale of 0-3. There is help with scoring and interpretation, case studies, and some technical information.

(TC# 223.3SOCBEA)

Strein, William. *Assessment of Self-Concept.* Located in: <u>Assessment in Counseling Therapy</u>, William D. Schaefer, Ed., 1995. Available from: ERIC/CASS, School of Education, 101 Park Bldg., University of North Carolina at Greensboro, Greensboro, NC 27412, (800) 414-9769 or (910) 334-4114; fax: (910) 334-4116.

This ERIC digest is a short, expert summary of assessing self-concept. It outlines the various components of self-concept, methods of assessing self-concept, and issues/current state-of-the-art. The authors imply that users need to be very careful of technical quality.

(TC# 223.6ASSSEC)

Taylor, Peter, Vaille Dawson, and Barry Fraser. ***Classroom Learning Environments Under Transformation: A Constructivist Perspective*****, April 1994. Available from: Barry J. Fraser, Curtin University of Technology, GPO Box U1987, Perth 6001, Australia.**

This article presents the results of two studies (in grades 8-10) that examine the *Constructivist Learning Environment Survey (CLES)* scales, an attempt to define what a constructivist classroom looks like. The *CLES* proposes five dimensions of "constructivism":

- *Personal Relevance*: relevance of learning to students' lives
- *Critical Voice*: extent to which students can express a critical opinion
- *Shared Control*: students participation in planning, conduct, and assessment of learning
- *Uncertainty*: continual change in student understanding of scientific knowledge
- *Student Negotiation*: extent to which students socially interact to derive meaning and reach consensus

The instrument is a revision of the more general classroom climate instrument, the *CEQ*, described in the paper by Fraser & Hoffman. This revision has 30 questions such as, "In this class I learned that science cannot provide perfect answers to problems." The technical information in the report shows acceptable reliability and independence of the dimensions.

(TC# 100.4CLALEE)

Tierney, William G., Ed. ***Assessing Academic Climates and Cultures, New Directions for Institutional Research*****, No. 68, Winter 1990. Available from: Jossey-Bass Inc., Publishers, 350 Sansome St., San Francisco, CA 94104, (415) 433-1740.**

This little book contains no actual instruments, but includes good discussions on what should be looked at (at the college level), general methods for gathering information, and a good bibliography.

(TC# 100.6ASSACC)

Torrance, E. Paul. ***Style of Learning and Thinking (SOLAT)*****, 1988. Available from: Scholastic Testing Service, Inc., Bensenville, IL 60106**

The *SOLAT* is designed to determine learning and thinking style, specifically right-brain (spatial, visual, and non-verbal) versus left-brain (linear, logical, analytical, and verbal). There are two forms for students in grades 1-5 (25 questions) and 6-12 (28 questions). Each question asks for a preferred activity or way of doing things. The authors note that lateralization is not stable until puberty, so results at earlier grade levels might vary over time.

There is assistance with interpretation and use of results. The list of reliability and validity studies is impressive. Norms are available.

(TC# 223.3STYOFL)

Weber, James M., and Kyle Klingler. *The Dropout Prediction Scale User's Guide*, 1990. Available from: Center on Education and Training for Employment, The Ohio State University, 1900 Kenny Rd., Columbus, OH 43210, (800) 484-4815 or (614) 292-4353.

The *Dropout Prediction Scale* is a survey designed for students in grades 7-12. The 13 questions ask students such things as: grade level, age, amount of homework done, future expectations, grades, attendance, and extracurricular activities. There is a disk that helps users score and interpret the results. No technical information is included.

(TC# 210.3DROPRS)

Wick, John W. *School Attitude Measure, Levels C/D-I/J, E, E/F, G/H, I/J,* and *K/L*; and *Directions for Administration, Level C/D, E, E-L,* and *K/L*, Second Edition, 1989. Available from: The American College Testing Program, 2201 N. Dodge St., PO Box 168, Iowa City, IA 52243, (319) 337-1051.

The *School Attitude Measure* (*SAM*) is designed to survey students' views of their academic environment and of themselves as students. There are five levels covering grades 1-12. The number of questions asked ranges from 50 to 100 depending on the specific grade level. The five scales are: motivation for schooling, academic self-concept, student sense of control over performance, and student instructional mastery. The following are examples of questions asked:

Level 1: "It is fun to come to school."

Level 2: "I do my school work on my own."

Level 3: "I am probably the smartest one in the class."

Level 4: "For me, when schoolwork is hard, it is the most interesting."

Level 5: "The best way for me to have a successful life later on is to finish school."

No technical information is supplied with the material, but norms are available. A revised edition should be available in 1996.

(TC# 210.3SCHATM2)

Witte, John F., and Daniel J. Walsh. ***A Systematic Test of the Effective Schools Model.*** **Located in: Educational Evaluation and Policy Analysis 12, Summer 1990, pp. 188-212.**

The primary purpose of this paper is to examine the relationships between student achievement, student background, and school climate. The 33 questions answered by teachers to measure school climate are included in the paper. The questions cover three main areas—overall school effectiveness (leadership, teacher support, general beliefs), teacher influence over policy and curriculum, and discipline and parental involvement (communication and effectiveness). Reliabilities are fair. Some relationship with student achievement is reported.

(TC# 100.4SYSTEE)

Wubbels, Theo. ***Teacher-Student Relationships in Science and Mathematics Classes.*** **Located in: Barry J. Fraser Ed., Research Implications for Science and Mathematics Teachers, Volume 1, 1993, Chapter 11, pp. 65-73. Available from: National Key Centre for School Science and Mathematics, Curtin University of Technology, GPO Box U 1987, Perth, Western Australia 6001, (09) 351-7896, fax: (09) 351-2503, e-mail: NTANNERTD@cc.curtin.edu.au Also available from ERIC: ED 370 767.**

The *Questionnaire on Teacher Interaction (QTI)* gathers information about secondary students' and teachers' perceptions of teacher interpersonal style. It is based on a model that posits eight types of interactions with students, characterized by various combinations of cooperation vs. opposition and domination vs. submission. The long version has 64 items. The short form, included in this paper, has 48 items. The paper includes technical information such as the factor structure of the instruments, which teacher styles students perfer, and teacher style relationship to student achievement.

(TC# 100.4TEASTR)

Ysseldyke, James, and Sandra Christenson. ***TIES-II—The Instructional Environment System-II. A System to Identify a Student's Instructional Needs,*** **1993-1994. Available from: Sopris West, Inc., 1140 Boston Ave., Longmont, CO 80501, (303) 651-2829.**

TIES-II is a system to assess the instructional need of individual students within the learning environment. There are several data collection and intervention planning tools that employ observation and interviewing:

1. The *Observation Record* is an anecdotal recording form that the observer uses while observing a classroom lesson. During the observation, the observer thinks about the student's instructional needs and four aspects of instruction—planning, management, delivery, and monitoring/evaluation.

2. The *Student Interview Record* is semi-structured and conducted with the instructional materials used with the student during the classroom observation. Questioning areas include (a) student understanding of assignments and teacher expectations, (b) student

self-efficacy, (c) student accountablity for learning, and (d) student cognitions about classroom instruction.

3. The *Teacher Interview Record* is conducted because observational data do not necessarily yield accurate information.

4. The *Instructional Needs Checklist* (optional) allows the consultant to gather information from the teacher about the student's strengths and weaknesses, instructional needs, and response to different tasks and materials.

5. The *Parent Interview Record* provides a structure for gathering information about five components of the home environment that are associated positively with student achievement: (a) expectations and attributions, (b) discipline, (c) parent-child interactions, (d) parent participation in schooling, and (e) structure for learning.

6. The *Instructional Environment Form* contains statements about 12 components of classroom instructional environments that are positively associated with student achievement.

6. The *Home Support for Learning Form* contains statements about five components of the home environment that are positively associated with student achievement.

7. The *Intervention Planning Form* is an outline of the collaborative planning process to be followed by the collaborative team.

All these surveys emphasize student learning style and classroom climate. Case studies and some technical information is included.

(TC# 100.3TIESII)

FACTORS THAT INFLUENCE ACHIEVEMENT
INDEX CODES

A—Purpose for the Assessment
1 = Large scale screening/planning
2 = Classroom
3 = Research
4 = Teacher/administrator evaluation
5 = Counseling

B—Grade Levels
1 = Pre k-k
2 = 1-3
3 = 4-6
4 = 7-9
5 = 10-12
6 = Adult
7 = Special education
8 = All
9 = Other

C—What Is Assessed
1 = Student self-concept: general
2 = Student self-concept: academic
3 = Student self-concept: social
4 = Student self-concept: parental
5 = Student self-concept: physical
6 = School climate/opportunity to learn
7 = Classroom climate
8 = Constructivist environment
9 = Motivation to learn
10 = Attitude toward school or individual subjects
11 = Locus of control
12 = Learning style
13 = Social interactions/behavior
14 = Persistence
15 = Anxiety
16 = Leadership
17 = Satisfaction
18 = Opportunity to learn
19 = Flexibility

D—Format
1 = Survey
2 = Portfolio
3 = Interview
4 = Observation
5 = Journal

E—Person Participating
1 = Students
2 = Teacher/staff
3 = Parents
4 = Other

F—Technical Information
1 = None
2 = Some
3 = Lots

G—Miscellaneous
1 = Related documents

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D1Grossnickle (TC= 110 3SCHDIC)
D1Guglielmino (TC= 223 3SELDIL)
D1Halderson (TC= 100 4COMASO)
D1Harter (TC= 223 3SELPEP1)
D1Harter (TC= 223 3SELPEP2)
D1Honey (TC= 223 3LEASTQ)
D1Howard (TC= 100 4COMASO)
D1Hynes (TC= 500 3K-5MAP)
D1IL St. Bd. of Ed. (TC= 440 3ILLGOR3)
D1Keefe (TC= 223 3LEASTP)
D1Kloosterman (TC= 500 3MEABEM)
D1Likert (TC= 130 3PROOFA)
D1Lorr (TC= 220 3INTSTI)
D1Marsh (TC= 210 3SELDEQu)
D1McKenna (TC= 440 3MEATOR)
D1Nat'l Study of Sch. Eval. (TC= 100 4STUTEA)
D1O'Brien (TC= 223 3MULDIS)
D1Offer (TC= 223 3OFFSE13)
D1Org. Analy. & Practice (TC= 100 4SCHCLSU)
D1Piers (TC= 223 3PIEHAC)
D1Rhodes (TC= 400 3LITASH
D1Ryan (TC= 500 3TEAPEI)
D1Sch. Att. Measure (TC= 210 3SCHATM2)
D1Skaalvik (TC= 500 3TESINE)
D1Smist (TC= 600 3GENDIA)
D1Soares (TC= 223 3SELPEI)
D1Taylor (TC= 100 4CLALEE)
D1Torrance (TC= 223 3STYOFL)
D1Weber (TC= 210 3DROPRS)
D1Wick (TC= 210 3SCHATM2)
D1Witte(TC= 100 4SYSTEE)
D2Candoli (TC= 110 4SUPPEE)
D2Rhodes (TC= 400 3LITASH
D3Candoli (TC= 110 4SUPPEE)
D3Fisher (TC= 110 4STULEE)
D3Rhodes (TC= 400 3LITASH
D4Annenberg (TC= 100 4WHASHL)
D4Brown (TC= 200 3BEHRAP2)
D4Candoli (TC= 110 4SUPPEE)
D4Coopersmith (TC= 223 3BEHACS)
D4Kneidek (TC= 100 4STUMIV)
D4Ladwig (TC= 700 4RESSES)
D4Newmann (TC= 050 3GUIAUI)
D4Ostlund (TC= 223 6SIZUPS)
D4Rhodes (TC= 400 3LITASH

D4Secada (TC= 500.4INTCOR)
D4Stephens (TC= 223.3SOCBEA)
D5Bagley (TC= 500.6ASSSTD)
D5Rhodes (TC= 400.3LITASH
D6Nichols (TC= 220.3DROPRP)
E1Bagley (TC= 500.6ASSSTD)
E1Battle (TC= 223.3CULFRS2)
E1Bolte (TC= 650.4CONAPL)
E1Bonk (TC= 100.4SCALES)
E1Bracken (TC= 223.3MULSEC)
E1Brown (TC= 200.3BEHRAP2)
E1Conrath (TC= 223.3CAPSOL)
E1Coopersmith (TC= 223.3SELESI)
E1Ctr. for Talent Dev. (TC= 220.3QUEELM)
E1Dusewicz (TC= 100.4DIMOFE2)
E1EdiTS (TC= 223.3DIMOFS2)
E1Epstein (TC= 140.4SURSCF)
E1Evans (TC= 110.4DEVSTP)
E1Fisher (TC= 110.4STULEE)
E1Fraser (TC= 100.4COMQUQ)
E1Fraser (TC= 600.3EVOVAP)
E1Germann (TC= 210.3DEVATT)
E1Glazer (TC= 400.6PORBEY)
E1Glendale (TC= 100.4GLEEFS2)
E1Gresham (TC= 200.3SOCSKR)
E1Guglielmino (TC= 223.3SELDIL)
E1Halderson (TC= 100.4COMASO)
E1Harter (TC= 223.3SELPEP1)
E1Harter (TC= 223.3SELPEP2)
E1Honey (TC= 223.3LEASTQ)
E1Howard (TC= 100.4COMASO)
E1Hynes (TC= 500.3K-5MAP)
E1IL St. Bd. of Ed. (TC= 440.3ILLGOR3)
E1Keefe (TC= 223.3LEASTP)
E1Kloosterman (TC= 500.3MEABEM)
E1Likert (TC= 130.3PROOFA)
E1Lorr (TC= 220.3INTSTI)
E1Marsh (TC= 210.3SELDEQu)
E1McKenna (TC= 440.3MEATOR)
E1Nat'l Study of Sch. Eval. (TC= 100.4STUTEA)
E1O'Brien (TC= 223.3MULDIS)
E1Offer (TC= 223.3OFFSE13)
E1Org. Analy. & Practice (TC= 100.4SCHCLSU)
E1Piers (TC= 223.3PIEHAC)
E1Rhodes (TC= 400.3LITASH
E1Sch. Att. Measure (TC= 210.3SCHATM2)
E1Skaalvik (TC= 500.3TESINE)
E1Smist (TC= 600.3GENDIA)
E1Soares (TC= 223.3SELPEI)
E1Taylor (TC= 100.4CLALEE)
E1Torrance (TC= 223.3STYOFL)
E1Weber (TC= 210.3DROPRS)
E1Wick (TC= 210.3SCHATM2)
E2Baldwin (TC= 130.4USIFAA)
E2Brown (TC= 200.3BEHRAP2)
E2CA DOE (TC= 100.4GUICRP)
E2Candoli (TC= 110.4SUPPEE)
E2Coopersmith (TC= 223.3BEHACS)
E2Dusewicz (TC= 100.4DIMOFE2)
E2Epstein (TC= 140.4SURSCF)
E2Fisher (TC= 110.4STULEE)
E2Glazer (TC= 400.6PORBEY)
E2Glendale (TC= 100.4GLEEFS2)
E2Gresham (TC= 200.3SOCSKR)
E2Grossnickle (TC= 110.3SCHDIC)
E2Halderson (TC= 100.4COMASO)
E2Harter (TC= 223.3SELPEP1)
E2Howard (TC= 100.4COMASO)
E2Hynes (TC= 500.3K-5MAP)
E2Likert (TC= 130.3PROOFA)
E2Nat'l Study of Sch. Eval. (TC= 100.4STUTEA)
E2Newmann (TC= 050.3GUIAUT)
E2Nichols (TC= 220.3DROPRP)
E2Org. Analy. & Practice (TC= 100.4SCHCLSU)
E2Ostlund (TC= 223.6SIZUPS)
E2Rhodes (TC= 400.3LITASH
E2Ryan (TC= 500.3TEAPEI)
E2Sch. Att. Measure (TC= 210.3SCHATM2)
E2Soares (TC= 223.3SELPEI)
E2Stephens (TC= 223.3SOCBEA)
E2Taylor (TC= 100.4CLALEE)
E2Witte(TC= 100.4SYSTEE)
E3Annenberg (TC= 100.4WHASHL)
E3Brown (TC= 200.3BEHRAP2)
E3Candoli (TC= 110.4SUPPEE)
E3Dusewicz (TC= 100.4DIMOFE2)
E3Epstein (TC= 140.4SURSCF)
E3Glendale (TC= 100.4GLEEFS2)
E3Gresham (TC= 200.3SOCSKR)
E3Halderson (TC= 100.4COMASO)
E3Howard (TC= 100.4COMASO)
E3Hynes (TC= 500.3K-5MAP)
E3Likert (TC= 130.3PROOFA)
E3Nat'l Study of Sch. Eval. (TC= 100.4STUTEA)
E3Sch. Att. Measure (TC= 210.3SCHATM2)
E3Soares (TC= 223.3SELPEI)
E4Brown (TC= 200.3BEHRAP2)
E4Candoli (TC= 110.4SUPPEE)
E4Hynes (TC= 500.3K-5MAP)
E4Ladwig (TC= 700.4RESSES)
E4Nat'l Study of Sch. Eval. (TC= 100.4STUTEA)
E4Newmann (TC= 050.3GUIAUT)
E4Secada (TC= 500.4INTCOR)
F1 Epstein (TC= 140.4SURSCF)
F1 Secada (TC= 500.4INTCOR)
F1Annenberg (TC= 100.4WHASHL)
F1Bagley (TC= 500.6ASSSTD)
F1CA DOE (TC= 100.4GUICRP)

BEST COPY AVAILABLE

F1Candoli (TC# 110 4SUPPEE)
F1Ctr. for Talent Dev. (TC# 220 3QUEELM)
F1Glazer (TC# 400 6PORBEY)
F1Glendale (TC# 100 4GLEEFS2)
F1Honey (TC# 223 3LEASTQ)
F1Howard (TC# 100 4COMASO)
F1Hynes (TC# 500 3K-5MAP)
F1IL St. Bd. of Ed. (TC# 440 3ILLGOR3)
F1Kneidek (TC# 100 4STUMIV)
F1Org. Analy. & Practice (TC# 100 4SCHCLSU)
F1Ostlund (TC# 223 6SIZUPS)
F1Rhodes (TC# 400 3LITASH
F1Weber (TC# 210 3DROPRS)
F2 Bolte (TC# 650 4CONAPL)
F2 Evans (TC# 110 4DEVSTP)
F2 Fisher (TC# 110 4STULEE)
F2 Fraser (TC# 600 3EVOVAP)
F2 Nat'l Study of Sch. Eval. (TC# 100 4STUTEA)
F2 O'Brien (TC# 223 3MULDIS)
F2Baldwin (TC# 130 4USIFAA)
F2Bonk (TC# 100 4SCALES)
F2Bracken (TC# 223 3MULSEC)
F2Conrath (TC# 223 3CAPSOL)
F2Dusewicz (TC# 100 4DIMOFE2)
F2EdiTS (TC# 223 3DIMOFS2)
F2Fraser (TC# 100 4COMQUQ)
F2Germann (TC# 210 3DEVATT)
F2Grossnickle (TC# 110 3SCHDIC)
F2Guglielmino (TC# 223 3SELDIL)
F2Harter (TC# 223 3SELPEP2)
F2Kloosterman (TC# 500 3MEABEM)
F2Ladwig (TC# 700 4RESSES)
F2McKenna (TC# 440 3MEATOR)
F2Newmann (TC# 050 3GUIAUT)
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F2Taylor (TC# 100 4CLALEE)
F2Witte(TC# 100 4SYSTEE)
F3Battle (TC# 223 3CULFRS2)
F3Brown (TC# 200 3BEHRAP2)
F3Coopersmith (TC# 223 3BEHACS)
F3Coopersmith (TC# 223 3SELESI)
F3Gresham (TC# 200 3SOCSKR)
F3Halderson (TC# 100 4COMASO)
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F3Keefe (TC# 223 3LEASTP)
F3Likert (TC# 130 3PROOFA)
F3Lorr (TC# 220 3INTSTI)
F3Nichols (TC# 220 3DROPRP)
F3Offer (TC# 223 3OFFSE13)
F3Piers (TC# 223 3PIEHAC)
F3Sch. Att. Measure (TC# 210 3SCHATM2)
F3Smist (TC# 600 3GENDIA)
F3Torrance (TC# 223 3STYOFL)
F3Wick (TC# 210 3SCHATM2)
G1Tierney (TC# 100 6ASSACC)